

REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1 and 23 are amended. Claims 1-30 are pending in the present application.

Entry of Amendment under 37 C.F.R. § 1.116

The Applicant requests entry of this Rule 116 Response because: the amendments were not earlier presented because the Applicant believed in good faith that the cited references did not disclose the present invention as previously claimed. The amendment places the application at least into a better form for purposes of appeal. No new matter is presented.

The Manual of Patent Examining Procedures (M.P.E.P.) sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The M.P.E.P. further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

I. Rejection under 35 U.S.C. § 112

In the Office Action, at page 2, numbered paragraph 2, claims 1-24 were rejected under 35 U.S.C. § 112, 1st paragraph as failing to comply with the written description requirement. Independent claims 1 and 23 were amended, and accordingly, withdrawal of the § 112 rejection is respectfully requested. Support for amended claims 1 and 23 is found in the specification, page 6, paragraphs 0034-0035, page 7, paragraph 0046 and Figures 1-2.

II. Rejection under 35 U.S.C. § 102

In the Office Action, at page 3, numbered paragraph 4, claims 1-7, 10, 12, 14-15, 17, 19-20 and 23-24 were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 6,453,541 to Guthrie et al. This rejection is respectfully traversed because Guthrie does not discuss or suggest:

disc pushers which are slidably provided outside the hub unit and include corresponding plate springs which push circumferences of the discs and center the discs;

supporting units provided in an end part of the plate springs, the plate springs being provided between the disc pushers and the

supporting units such that the supporting units compress and support the corresponding plate springs with respect to the disc pushers and reinforce a restoring force of the plate springs where a force applied on the plate springs is removed,

as recited in amended independent claim 1. Guthrie further does not discuss or suggest:

a disc centering unit including a disc pusher and plate springs which are slidably provided outside the hub unit and simultaneously pressurize circumferences of the discs to center the discs, wherein the disc centering unit includes reinforcing units provided at respective side ends of the plate springs, the plate springs being provided between the disc pusher and the reinforcing units such that the reinforcing units compress and support the corresponding plate springs with respect to the disc pusher, and that provide for the same carrying capacity of the discs and restore the plate springs to an original state after a disc centering operation where a force applied on the plate springs is removed,

as recited in amended independent claim 23.

As a non-limiting example, the present invention as set forth in amended claim 1, for example, is directed to a disc centering device that includes disc pushers that include plate springs which push circumferences of the discs and center the discs. Supporting units are provided in an end part of the springs such that the plate springs are provided between the supporting units and the disc pushers. The supporting units compress and support the plate springs with respect to the disc pushers. The supporting units support the plate springs so as to reinforce a restoring force of the plate springs after a force applied on the plate springs is removed.

Guthrie discusses a disc centering device which includes three disc support blocks 410, motor centering springs 412 and disc centering springs 614. In Guthrie, "projecting outwardly from each of the disc support blocks 410 towards the central portion of the circular, fixed hardened stop 430 is an arm member 412 that has a motor centering spring 414 at its far end" (col. 6, lines 54-57). Further, in Guthrie, "a stack or head of disc centering springs 614 is shown also mounted on each of the arms 412" (col. 7, lines 41-42). The Examiner argues that the arms 412 of Guthrie correspond to the supporting units of the present invention. In further clarification in amended independent claim 1 and similarly in amended independent claim 23, the supporting units of the present invention are provided in an end part of the plate springs such that the plate springs are provided between the disc pushers and the supporting units, as is disclosed in Figs. 1-2. Guthrie discusses that the disc centering springs 614 are mounted on the arms 412, but does not discuss or suggest that the supporting units are provided in an end part of the springs where the springs are provided between the disc pushers and the supporting units in such a

manner that the supporting units compress and support the corresponding plate springs with respect to the disc pushers so as to reinforce a restoring force of the plate springs when a force applied to the plate springs is removed. Additionally, the motor centering springs 414 of Guthrie are provided at a far end of the arm member 412. In contrast, in the present invention, the supporting units are provided in an end part of the springs such that the springs are between the supporting units and the disc pushers and such that the supporting units compress and support the plate springs with respect to the disc pushers. Further, in the present invention, after a disc centering operation when a force applied on the springs is removed, the supporting units reinforce a restoring force of the plate springs.

Therefore, as Guthrie does not discuss or suggest "supporting units provided in an end part of the plate springs, the plate springs being provided between the disc pushers and the supporting units such that the supporting units compress and support the corresponding plate springs with respect to the disc pushers and reinforce a restoring force of the plate springs where a force applied on the plate springs is removed," as recited in amended independent claim 1, and does not discuss or suggest "reinforcing units provided at respective side ends of the plate springs, the plate springs being provided between the disc pusher and the reinforcing units such that the reinforcing units compress and support the corresponding plate springs with respect to the disc pusher, and that provide for the same carrying capacity of the discs and restore the plate springs to an original state after a disc centering operation where a force applied on the plate springs is removed," as recited in amended independent claim 23, claims 1 and 23 patentably distinguish over the references relied upon. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

Claims 2-7, 10, 12, 14, 15, 17, 19-20 and 24 depend either directly or indirectly from amended independent claims 1 and 23 and include all the features of their respective independent claims, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 5 recites that "the support block completely covers the side end part of the corresponding plate spring." Therefore, claims 2-7, 10, 12, 14, 15, 17, 19-20 and 24 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the § 102(b) rejection is respectfully requested.

III. Rejection under 35 U.S.C. § 103

In the Office Action, at page 5, numbered paragraph 6, claims 8-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Guthrie. This rejection is respectfully traversed.

Claims 8-9 depend either directly or indirectly from amended independent claim 1. As discussed above, Guthrie does not discuss or suggest the features of amended claim 1. Further, claims 8 and 9 include all the features of claim 1, plus additional features that are not discussed or suggested by the reference relied upon. For example, claim 8 recites that "the centering value of the discs is maintained within a deviation of about 30 μm or less." Therefore, claims 8-9 patentably distinguish over the reference relied upon for at least the reasons noted above. Accordingly, withdrawal of the \S 103(a) rejection is respectfully requested.

IV. Allowable Subject Matter

Applicants are appreciative of the indication that claims 25-30 are allowed.

Conclusion

In accordance with the foregoing, claims 1 and 23 have been amended. Claims 1-30 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

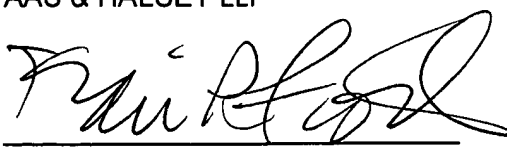
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 7/24/00

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